

Applic. No. 10/803,853

Amdt. dated March 16, 2005

Reply to Office action of December 16, 2004

Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (original): A threaded pin for connecting into a socket formed with an internal thread, the pin comprising:

a pin body having a central axis, first and second end portions, a midplane defined between said end portions, and an external thread; and

said pin body having a protrusion forming an abutment surface extending radially beyond said external thread and facing towards one of said end portions.

Claim 2 (original): The threaded pin according to claim 1, wherein said pin body is formed to connect carbon electrodes formed with at least one socket having the internal thread.

Claim 3 (original): The threaded pin according to claim 1, wherein said abutment surface forms part of a flange integrally formed on said pin body.

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Claim 4 (original): The threaded pin according to claim 1, which comprises a retaining nut formed with an internal thread meshing with said external thread of said pin body, and wherein said abutment surface is formed on said retaining nut.

Claim 5 (original): The threaded pin according to claim 4, wherein said retaining nut is formed of graphite.

Claim 6 (original): The threaded pin according to claim 4, wherein said retaining nut is formed of a polymeric material.

Claim 7 (original): The threaded pin according to claim 6, wherein said polymeric material is polyphenylenether.

Claim 8 (original): The threaded pin according to claim 1, wherein at or in a vicinity of said midplane, said first end portion has a smaller diameter than said second end portion, said abutment surface is formed as a protruding annular surface of said second end portion, and said abutment surface faces in a direction of said first end portion.

Claim 9 (original): The threaded pin according to claim 1, wherein at least one of said first and second end portions has a conical portion formed with said external thread.

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Claim 10 (original): The threaded pin according to claim 9, wherein at least one of said first and second end portions has a cylindrical portion formed between said midplane and said conical portion.

Claim 11 (currently amended): The threaded pin according to claim [[9]] 10, wherein said abutment surface extends substantially perpendicularly and adjacent to said cylindrical portion.

Claim 12 (original): The threaded pin according to claim 10, wherein said thread is formed with windings on said conical portion, and said windings have a reduced height in a portion thereof, defining said cylindrical portion.

Claim 13 (original): The threaded pin according to claim 10, wherein said cylindrical portion is formed as a reduction in a diameter of said conical portion.

Claim 14 (currently amended): An electrode assembly, comprising:

~~an electrode~~ two electrodes of carbon material each formed with a respective socket having an internal thread and a bottom end;

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a pin of carbon material formed with an external thread ~~for connecting to said electrode~~ and an two end portion portions for connecting said two electrodes to form an electrode column;

at least one of said electrode electrodes and said pin each having an abutment surface configured to come into contact with the respectively other said abutment surface when said pin is screwed into said socket, before said end portion of said pin reaches said bottom end of said socket, said abutment surface of said pin being defined on a protrusion formed on one of said two end portions, and said protrusion projecting radially beyond said external thread.

Claim 15(currently amended): The electrode assembly according to claim ~~[[14]]~~ 18, wherein said electrode is one of two electrodes each formed with a respective socket, and said pin is formed with two end portions for connecting said two electrodes to form an electrode column.

Claim 16 and 17 (cancelled).

Claim 18 (currently amended): ~~The electrode assembly according to claim 17, wherein~~

An electrode assembly, comprising:

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an electrode of carbon material formed with a socket having an internal thread and a bottom end;

a pin of carbon material formed with an external thread for connecting to said electrode and an end portion;

said electrode and said pin each having an abutment surface configured to come into contact with the respectively other said abutment surface when said pin is screwed into said socket, before said end portion of said pin reaches said bottom end of said socket, said abutment surface of said socket adjoining a recessed portion of said socket, and said abutment surface of said pin is being defined on a protrusion formed on said end portion, and said protrusion projects projecting radially beyond said external thread.

Claim 19 (original): The electrode assembly according to claim 14, wherein said end portion of said pin is formed with a substantially cylindrical portion adjacent said abutment surface of said pin.

Claim 20 (currently amended): The electrode assembly according to claim [[14]] 18, wherein said external thread of said pin and said internal thread of said socket have thread windings with a substantially uniform lead, a root, a crest, and a substantially V-shaped profile, wherein at least one of

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said internal and external threads is formed with a wedge ramp at said root, and wherein said crests of a respectively other thread abut against said wedge ramps when said pin is screwed into said socket.